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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/081,133	02/22/2002	Juhani Peuramaki	72989	8534	
22242 75	90 06/15/2006		EXAMINER		
	TABIN AND FLANNE SALLE STREET	JACKSON, MONIQUE R			
SUITE 1600	· Or IEEE OTTOE		ART UNIT	PAPER NUMBER	
CHICAGO, IL 60603-3406			1773		
			DATE MAILED: 06/15/2006	DATE MAILED: 06/15/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

			Application No.	Applicant(s)				
Office Action Summary		10/081,133	PEURAMAKI, JUHANI					
		Examiner	Art Unit					
			Monique R. Jackson	1773				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
WHIC - Exter after - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MINIOR OF THE MI	MAILING DA s of 37 CFR 1.13 munication. tatutory period w y will, by statute,	ATE OF THIS COMMUNICATION  16(a). In no event, however, may a reply be tim  ill apply and will expire SIX (6) MONTHS from  cause the application to become ABANDONEI	I.  lely filed the mailing date of this c (35 U.S.C. § 133).				
Status								
1) 🛛	Responsive to communication(s) file	ed on <i>16 Ma</i>	arch 2006.					
·			action is non-final.					
3)	, <del></del>							
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Dispositi	on of Claims							
4)⊠	4) Claim(s) <u>48-71</u> is/are pending in the application.							
•	4a) Of the above claim(s) <u>61-66</u> is/are withdrawn from consideration.							
	☐ Claim(s) is/are allowed.							
6)⊠	Claim(s) <u>48-58 and 67-69</u> is/are rejected.							
7)🖂	Claim(s) <u>59,60,70 and 71</u> is/are objected to.							
8)□	Claim(s) are subject to restriction and/or election requirement.							
Applicati	on Papers							
9)🖂	The specification is objected to by the	ne Examiner	•					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority u	ınder 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:								
,-	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
	3. Copies of the certified copies of the priority documents have been received in this National Stage							
	application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.								
Attachmen	t(s)							
	e of References Cited (PTO-892)			4) Interview Summary (PTO-413)				
	e of Draftsperson's Patent Drawing Review (I nation Disclosure Statement(s) (PTO-1449 or		Paper No(s)/Mail Da 5) Notice of Informal Pa	No(s)/Mail Date of Informal Patent Application (PTO-152)				
	r No(s)/Mail Date		6)  Other:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	•			

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### **DETAILED ACTION**

### Election/Restrictions

1. Newly submitted claims 61-66 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the new claims are directed to an intermediate product comprising a flowable or liquid polyurethane layer which is classified in a different subclass than the original claims and may be used to make a different final product.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 61-66 have been withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

- 2. The amendment filed 3/16/06 has been entered. Claims 1-47 have been canceled. New claims 61-71 have been added. Claims 48-71 are pending in the application. Claims 61-66 have been withdrawn from consideration.
- 3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### **Specification**

4. The disclosure is objected to because of the following informalities: a brief description of the drawings is not provided.

Appropriate correction is required.

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## Claim Objections

5. Claim 59 is objected to because of the following informalities: "for" or similar term should be inserted between "120° to 140°C" and "1 to 5 minutes". Appropriate correction is required.

6. Claim 71 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. New Claim 71 recites "The insulation material of claim 71" and hence depends from itself and not a previous claim.

## Claim Rejections - 35 USC § 112

- 7. The following is a quotation of the first paragraph of 35 U.S.C. 112:
  - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 8. Claims 48-58 and 67-69 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claims recite the limitation heating the "glutinous polyamide...for a time and temperature effective to crystallize the polyamide", however, considering the infinite number of polyamide polymers, each with different DSC or temperature profiles, e.g. glass transition temperature (Tg), crystalline melting temperature (Tm), heat of crystallization, etc., the original disclosure at the time of filing does not provide one having ordinary skill in the art sufficient guidance for selecting the "effective"

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heating time and heating temperature upon which the claimed polyamide would crystallize under heat. It is generally noted that in extruding a crystalline polymer, the polymer is heated to a molten state and the ordered crystalline phases melt resulting in an amorphous polymer, as similarly discussed in the instant specification. If the amorphous polymer is <u>cooled</u> at a slow enough rate, the polymer will re-crystallize, however cooled too quickly from Tm to below Tg, such as by rapidly quenching, the polymer may not be given sufficient time to form ordered crystalline lattices and hence remains in a metastable amorphous state. When annealed or heated above Tg and below Tm, the amorphous phases in the polymer will crystallize, as the polymer chains gain the mobility necessary to pack into a lattice, assuming sufficient time is allotted for crystal lattice formation. Thus, given the claims require heating the polyamide for a time and temperature effective to crystallize the glutinous polyamide and given the infinite number of possible polyamides and possible polyamide-6/66 mixtures, the original disclosure at the time of the invention fails to provide guidance on how to select the "effective" heating time and heating temperature to crystallize the glutinous polyamide without performing undue experimentation.

# Allowable Subject Matter

9. Claims 59, 60 and 70 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

## Response to Arguments

10. Applicant's arguments filed 3/16/06 have been considered but are most in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique R. Jackson whose telephone number is 571-272-1508. The examiner can normally be reached on Mondays-Thursdays, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Monique R. Jackson Primary Examiner

Technology Center 1700

June 12, 2006